Amendments

Please cancel claims 20-22 without prejudice or disclaimer and amend the remaining claims as follows:

1. (Amended) A porous composite matrix, comprising a matrix constructed from matrix formers comprising a hyaluronic acid derivative and a hydrolyzed collagen, and wherein the matrix formers are present in a weight ratio range of hyaluronic acid derivative to hydrolyzed collagen of 30:70 to 99:1.

2. (Amended) The composite matrix as claimed in claim 1, wherein the matrix formers are present in a weight ratio range of hyaluronic acid derivative to hydrolyzed collagen of 60:40 to 99:1.

3. (Amended) A composite matrix as claimed in claim 1, wherein the hydrolyzed collagen is partially or completely hydrolyzed.

4. (Amended) A composite matrix as claimed in claim 1, wherein the hydrolyzed collagen is additionally derivatized and/or crosslinked.

5. (Amended) A composite matrix as claimed in claim 1, wherein the hyaluronic acid derivative is a hyaluronic acid ester.

6. (Amended) A composite matrix as claimed in claim 5, wherein the hyaluronic acid ester is an ethyl or benzyl ester of hyaluronic acid.

7. (Amended) A composite matrix as claimed in claim 1, further comprising pores having an average diameter in the range of 10-1000 μm.

8. (Amended) A composite matrix as claimed in claim 7, wherein the pores have an average diameter in the range of 100-350 μm.

9. (Amended) A composite matrix as claimed in claim 7, wherein the pores have an average diameter in the range of 350-1000 μm.

10. (Amended) A composite matrix as claimed in claim 8 further comprising pores in the range of 10-100 μm.

11. (Amended) A composite matrix as claimed in claim 1, further comprising crosslinkages.

12. (Amended) A composite matrix as claimed in claim 1, further comprising biologically active compounds.

13. (Amended) A composite matrix as claimed claim 1, further comprising chondrocytes, mesenchymal stem cells, mesenchymal progenitor cells, osteoblasts and connective tissue cells.

14. (Amended) A process for the production of a porous composite matrix as claimed in claim 1, comprising:

dissolving or suspending a hyaluronic acid derivative and a hydrolyzed collagen in a suitable first solvent to form a solution or suspension,

adding a pulverulent compound to the solution or suspension, wherein the pulverulent compound is virtually insoluble in the first solvent, and wherein the pulverulent compound is soluble in a second solvent, in which the matrix formers hyaluronic acid derivative and hydrolyzed collagen are virtually insoluble, wherein the pulverulent compound has an average particle size distribution in the range of the desired pore size of the composite matrix to be produced,

removing the first solvent, and

dissolving the pulverulent compound in the second solvent, in which the pulverulent compound dissolves and the matrix formers are virtually insoluble to obtain said porous composite matrix.

15. (Amended) The process as claimed in claim 14, wherein the first solvent is 1,1,1,3,3,3-hexafluoro-isopropanol.

16. (Amended) The process as claimed in claim 14, wherein the pulverulent compound is a water-soluble alkali metal or alkaline earth metal salt.

17. (Amended) The process as claimed in claim 14, wherein the second solvent is water.

18. (Amended) The process as claimed in claim 14, wherein the composite matrix is additionally shaped, dried and optionally sterilized.

19. (Amended) The process as claimed in claim 14, wherein the composite matrix is additionally loaded with biologically active compounds and chondrocytes, mesenchymal stem and progenitor cells, osteoblasts or connective tissue cells.

23. (Amended) An implant, comprising a porous composite matrix as claimed in claim 1.

24. (Amended) A process for the production of an implant as claimed in claim 23, comprising coating a porous composite matrix onto a surface of said implant, wherein said porous composite matrix comprises a matrix constructed from matrix formers comprising a hyaluronic acid derivative and a hydrolyzed collagen, and wherein the matrix formers are present in a weight ratio range of hyaluronic acid derivative to hydrolyzed collagen of 30:70 to 99:1.

Please add the following new claims:

25. (New) The composite matrix as claimed in claim 1, wherein the matrix formers are present in a weight ratio range of hyaluronic acid derivative to hydrolyzed collagen of approximately 70:30.

26. (New) A composite matrix as claimed in claim 9, further comprising pores in the range of 10-100 μm.

27. (New) The process as claimed in claim 14, wherein the pulverulent compound is an alkali metal halide.

28. (New) The process as claimed in claim 14, wherein the pulverulent compound is sodium chloride.

29. (New) The process as claimed in claim 15, wherein the pulverulent compound is a water-soluble alkali metal or alkaline earth metal salt.

30. (New) The process as claimed in claim 15, wherein the pulverulent compound is an alkali metal halide.

31. (New) The process as claimed in claim 15, wherein the pulverulent compound is sodium chloride

32. (New) A process for generating differentiated tissue from chondrocytic cells or mesenchymal stem and progenitor cells, comprising adding freshly removed or amplified cells to a composite matrix as claimed in claim 1, and optionally culturing said cells under chondro-, osteo-or fibrogenic conditions.

33. (New) A process for generating differentiated tissue from chondrocytic cells or mesenchymal stem and progenitor cells, comprising culturing cells added to a composite matrix as claimed in claim 1 under chondro-, osteo-or fibrogenic conditions.

34. (New) The process as claimed in claim 32, wherein said process is for the tissue engineering of tissue types of the connective and supportive apparatus.

35. (New) The process as claimed in claim 32, wherein said process is for the in-vivo differentiation of the cells to tissue types of the connective and supportive apparatus.

36. (New) The process as claimed in claim 34, wherein said tissue is chondral and osseous tissue.

37. (New) The composite as claimed in claim 12, wherein the biologically active compounds are selected from the group consisting of antibiotics, compounds for improving cell adhesion, calcium salts, inductive factors, and further glycosaminoglycans and their derivatives.

38. (New) The process as claimed in claim 35, wherein said tissue is chondral or osseous tissue.